

## CLAIMS

What I claim as my invention is:

1. An integrated database data editing system, including the following mechanisms and characters:

- 5 (i) the system edits database remotely through either intranet or Internet or locally on the same computer; and
- (ii) the editing system provides visual graphic user interfaces and tools which are very efficient and easy-to-use; and
- (iii) the system is used to edit the text (ASCII), character and binary data; and
- 10 (iv) the system is specially valuable for editing the large text or binary database data files; and
- (v) the system incorporates the commercial text or multimedia data editors to edit the database data; and
- (vi) the user authentication and access control mechanisms are well
- 15 implemented; and
- (vii) the database data transmission through Internet is secured by using the Secure Socket Layer (SSL), Secure Electronic Transaction (SET) and Public Key Infrastructure (PKI) technologies.

2. The database data editing system of claim 1 contains a well-defined graphic user interface that displays a database table or a subset data of a table and has the following novel characters:

- (i) the data on each table cell is defaulted as read only; and
- (ii) the data on each table cell is editable when "single-clicked" by the mouse; and
- 25 (iii) a commercial data editor is called and "popped up" from the local client computer when the user "double-clicks" the data of a table cell by the mouse; and
- (iv) the data editor is either a text editor or a multimedia editor depending on the data type inside the table cell; and
- (v) a list of available data editors is available for the user to choose.

30 3. The database data editing system of claim 1 contains a Database Data Manager which provides a user-friendly environment and tools to edit the database data;

and which contains a Header Panel or Frame containing a Database Table List and a Detail Panel or Frame including a Entity Relationship Designer, a Table Designer, a Database Schema, a Data Filter and an SQL Console.

4. The client/server version of the editing system of claim 1 is installed and  
5 run on the intranet and is implemented by using mainly Java technologies such as Java AWT, Swing, Applet, JDBC/ODBC, SQL, etc.

5. The wherein said Database Data Manager of claim 3 of wherein said  
client/server version of claim 4 can call either the Single Document Interface (SDI) form  
to display one table or the Multiple document Interface (MDI) forms to display multiple  
10 tables.

6. The web version of the editing system of claim 1 is installed on a web  
server and accessed through the Internet by a client and is implemented by using mainly  
Java and web technologies such as Servlet, Java ServerPages, JDBC/ODBC, SQL,  
HTML, DHTML, JavaScript, Applet, etc.

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